UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,326	02/19/2004	Thomas E. Dueber	HP0085USNA	5406

23906 7590 02/13/2007

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER	
WOODWARD, ANA LUCRECIA	
ART UNIT	**PAPER NUMBER**
1711	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

C

Office Action Summary	Application No.	Applicant(s)	
	10/782,326	DUEBER ET AL.	
	Examiner	Art Unit	
	Ana L. Woodward	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on April 27, 2006

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-13 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, the recitation of the diamine BAPS has an uneven number of parenthesis.

In claim 7, it is unclear if or how the subject matter further limits claim 6 given that the A values are outside the corresponding scope per claim 6.

In claim 8, it is unclear if or how the subject matter further limits the base claim given that the recited diamines are not members of the Markush grouping set forth in the base claim.

In claim 9, line 3, "derived from of" is queried.

In claim 11, it is unclear if or how the polyetherimide distinguishes over the polyetherimide embodiment defining the base polyimide.

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 6-8, 11 and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 5,714,572 (Kato).

Kato discloses polyimide resin compositions comprising a polyimide resin and a solvent. Suitable polyimides comprise repeating units falling within the scope of applicants' formula I. Suitable solvent systems comprise cyclohexanone in combination with ketones such as acetophenone, esters such as methylbenzoate and butyrolactone. Particularly noted are the exemplified polyimides comprising repeating units derived from 2,2-bis[4-(4-aminophenoxy)phenyl]propane (TFMB) and 2,2-bis(3,4-dicarboxyphenyl)perfluoropropane dianhydride, satisfying the presently claimed proviso iii). Also noted is the use of cyclohexanone in combination with butyrolactone, reading on presently claimed solvent of formula II.

The exemplified compositions of the reference meet the requirements of the above-rejected claims both in terms of the types of materials added and their contents. Given the chemical similarity to those presently claimed, it would be expected that the reference solvent would inherently meet all properties presently claimed. The onus is shifted to applicants to establish that the compositions of the present claims are not the same as or obvious from that set forth by the reference.

Claim 11 has been incorporated to the extent the recited polyetherimide reads on the ether-containing polyimides exemplified, that is, said components read on one and the same entity.

The coating of the composition solutions onto metals such as nickel, copper and SiO2 materials is deemed to meet the requirements of claim 12.

5. Claims 1; 2, 6-8 and 11-13 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 7,018,776 (Rushkin et al).

Rushkin et al disclose compositions comprising a polyimide, a solvent comprising gamma-butyrolactone and one or more adhesion promoters. Comparative example 2 comprises a composition comprising polyimide derived form 2,2'-bis-(3,4-dicarboxyphenyl)hexafluoropropane dianhydride (6FDA) and 4,4'-oxydiphthalic anhydride (ODPA) and 1,4-phenylenediamine, reading on the presently claimed polyimide, and gamma-butyrolactone, reading on presently claimed solvent of formula II. Comparative example 5 comprises a composition comprising polyimide derived form 4,4'-oxydiphthalic anhydride (ODPA) and 1,4-phenylenediamine, reading on the presently claimed polyimide, and gamma-butyrolactone, reading on presently claimed solvent of formula II.

The exemplified compositions of the reference meet the requirements of the above-rejected claims both in terms of the types of materials added and their contents. Given the chemical similarity to those presently claimed, it would be expected that the reference solvent would inherently meet all properties presently claimed. The onus is shifted to applicants to establish that the compositions of the present claims are not the same as or obvious from that set forth by the reference.

Claim 11 has been incorporated to the extent the recited polyetherimide reads on the ether-containing polyimides exemplified, that is, said components read on one and the same entity.

The coating of the composition solutions onto metal substrates via silane adhesion promoters is deemed to meet the requirements of claims 12 and 13.

Claim Rejections - 35 USC § 103

6. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,714,572 (Kato), described hereinabove.

It is maintained that the use of either acetophenone or methyl benzoate in place of the exemplified butyrolactone is within the general scope of the reference and, as such, obvious to one having ordinary skill in the art.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-8, 12 and 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 11/453,388. Although the conflicting claims are not identical, they are not

patentably distinct from each other because the polyimide and solvent components of the copending application generically embrace the corresponding components of the present claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Amendment

9. Applicant's amendment filed April 27, 2006 has effectively overcome the previous art rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (571) 272-1082. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ANA WOODWARD
PRIMARY EXAMINER